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EXAMINER
RAMPURIA, SATISH

ART UNIT	PAPER NUMBER
2191	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	09/817,437	TODD ET AL.
Office Action Summary	Examiner	Art Unit	
	Satish S. Rampuria	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 April 2005*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-89* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-89* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the RCE filed on 04/12/5002.

2. Claims 1, 4, 12, 15, 34, 39, 46, 49, 52, 55, 59, 63, 64, 68, 69, 70, 71, 75, 76, 82 and 83 are amended.

3. Claims 11, 23, 51, 74 and 88 were previously amended.

4. The rejections under 35 U.S.C. §112 second paragraph to claims 1, 4, 12, 15, 49, 52, 59, 63, 68, 70 and 75 is withdrawn in view of applicant's amendment.

5. Claims 1-89 are pending.

6. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/12/2005 has been entered.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 37, 49 and 68 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 37, 49 and 68 is drawn to functional descriptive material NOT claimed as residing on a computer readable medium. MPEP 2106.IV.B.1(a) (Functional Descriptive Material) states:

"Data structures not claimed as embodied in a computer-readable medium are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer."

"Such claimed data structures do not define any structural or functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized."

Claims 37, 49 and 68, while defining a computer program product (whatever is claimed; e.g., a computer program, an algorithm, a medium, a program providing medium, a memory, etc.), does not define a "computer-readable medium" and is thus non-statutory for that reasons. A computer program product (whatever is claimed; e.g., a computer program, an algorithm, a medium, a program providing medium, a memory, etc.) can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggest amending the claim to embody the program on "computer-readable medium" in order to make the claim statutory.

In contrast, a claimed computer-readable medium encoded with the data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory."-MPEP 2106.I.B.1(a)

The rejection of the base claim is necessarily incorporated into the dependent claims 38-49, 50-51 and 68.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a

whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1, 2, 4-6, 8-10, 12, 24-25, 27-29, 31-34, 37-39, 41-42, 44-47, 49-50, 52-55, 57-59,

60-62, 75-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent

No. 5,960,200 to Eager et al., hereinafter called Eager in view of US Patent No.

5,295,256 to Bapat hereinafter called Bapat.

Per claim 1:

Eager discloses:

- A computer system employing management software written in a first computer language

  compatible with first software architecture and not compatible with second software

  architecture (col. 4, lines 23-30 "FIG. 1…the system 1 includes a multi-tiered

  architecture 10, a re-architecting system 20 for converting source applications of an

  enterprise to target applications on the multi-tiered architecture 10…"), said system

  comprising:

- a schema formed within said first software architecture (col. 20, lines 25-32 "The schema

  is the logical level description tool. In the relational model, a database schema consists

  of the description of the tables, their fields, and the fields formats and domains");

- header files contained within said schema (col. 29, lines 11-15 "…the schema header file

  238d having information for each segment using the DBDxx 232a and corresponding

  DBDxxL 232b to provide schema information to application programs"), said header

  files being represented in said first language and capable of being utilized by said

  management software (col. 23, lines 17-25 "Target user interface definitions 213 can

  take one of three forms: database files 246, a header file");

- means for converting said called public functions and/or data attributes to representations of said called public functions and/or data attributes formed in a different computer language compatible with said second architecture (col. 2, lines 44-57 "...the automated capability to translate existing source applications into new target applications on a multi-tiered client/server architecture... translation of source applications to target applications includes the conversion of user interfaces, procedural languages, and data definitions... conversions use a two-phase process where source program components written in the source languages are first translated to components in a common intermediate language... intermediate language components are then translated to target program components in the target languages... one translation module is required for each source and target language").

Eager does not explicitly disclose means for manipulating said header files to locate public functions and/or data attributes of said header files; means, responsive to operation of said manipulating means, for emitting code that calls said public functions and/or data attributes in said first language to obtain called public functions and/or data attributes.

However, Bapat discloses in an analogous computer system means for manipulating (col. 3, lines 53-54 "manipulating a representation of the object class... stored... table schema") said header files (col. 9, lines 1-2 "C++ source and header files are opened") to locate public functions and/or data attributes of said header files (col. 6, lines 28-29 "it is desirable to be able to provide... storage of the attributes of these objects managed by the network management system"); means, responsive to operation of said manipulating means(col. 3, lines 53-54

"manipulating a representation of the object class... stored... table schema"), for emitting code

that calls said public functions and/or data attributes in said first language to obtain called

public functions and/or data attributes (col. 13, lines 15-16 "Control... passes to... attribute

insertion routine is called of each attribute").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

the invention was made to incorporate the method of manipulating header files as taught by

Bapat into the method of transition an entire business enterprise to a distributed infrastructure as

taught by Eager. The modification would be obvious because of one of ordinary skill in the art

would manipulate the header files where the transition of enterprise occurs as suggested by Eager

(col. 1 to 2, lines 64-67 and 1-6).

Per claim 2:

The rejection of claim 1 is incorporated, and further, Eager discloses:

- forwarding said representations to desired destinations within and beyond said system

   (see FIG. 1 and related discussion).

Per claim 4:

The rejection of claim 1 is incorporated, and further, Eager discloses:

- means for opening at least one of said header files containing a declaration of at least one

   of said objects (col. 23, lines 60-62 "a header file 247 is then passed to the business

   process layer 120 to provide information necessary during application runtime

   operations");

- means for parsing said at least one of said header files to obtain name of class and name of parent class to which said at least one of said objects belongs (see FIG. 16 and related discussion); and,

- means for creating a subroutine for accepting said at least one of said objects in said first computer language and generating the equivalent of said at least one of said objects in a different computer language compatible with said second software architecture (see FIG. 16 and related discussion).

Per claim 5:

The rejection of claim 1 is incorporated, and further, Eager discloses:

- means for inhibiting initiation of operation of said converting means until said public functions and/or data attributes of said header files are located (see FIG. 2 and related discussion).

Per claim 6:

The rejection of claim 1 is incorporated, and further, Eager discloses:

- means for initiating operation of said converting means upon locating the first of any one of said public functions and/or data attributes (see FIG. 2 and related discussion).

Per claim 8:

The rejection of claim 1 is incorporated, and further, Eager discloses:

- said first computer language is a first object-oriented language capable of pictorial

    representation typically in a parent-child tree configuration and said different computer

    language is a second object-oriented language capable of pictorial representation

    typically in a flat database configuration (see FIG. 20A and 20B and related discussion).

Per claim 9:

The rejection of claim 1 is incorporated, and further, Eager discloses:

- means for inhibiting initiation of operation of said converting means until said public

    functions and/or data attributes of at least one of said header files are located (see FIG. 2

    and related discussion).

Per claim 10:

The rejection of claim 1 is incorporated, and further, Eager discloses:

- said management software is storage management software (col. 2, lines 30-35 "A

    transition of an entire business enterprise to a distributed infrastructure based on the new

    architecture is performed using a process for organizing and managing the transition...

    this requires that each legacy (source) application be identified and prioritized").

Per claim 13:

The rejection of claim 12 is incorporated, and further, Eager discloses:

- forwarding said representations to desired destinations within and beyond said system (see FIG. 1 and related discussion).

Per claim 15:

The rejection of claim 12 is incorporated, and further, Eager discloses:

- apparatus for opening at least one of said header files containing a declaration of at least one of said objects (col. 23, lines 60-62 "a header file 247 is then passed to the business process layer 120 to provide information necessary during application runtime operations");

- apparatus for parsing said at least one of said header files to obtain name of class and name of parent class to which said at least one of said objects belongs (see FIG. 16 and related discussion); and,

- apparatus for creating a subroutine for accepting said at least one of said objects in said first computer language and generating the equivalent of said at least one of said objects in a different computer language compatible with said second software architecture (see FIG. 16 and related discussion).

Per claim 16:

The rejection of claim 12 is incorporated, and further, Eager discloses:

- apparatus for inhibiting initiation of operation of said converting means until said public functions and/or data attributes of said header files are located (see FIG. 2 and related discussion).

Per claim 17:

The rejection of claim 12 is incorporated, and further, Eager discloses:

- apparatus for initiating operation of said converting means upon locating the first of any

  one of said public functions and/or data attributes (see FIG. 2 and related discussion).

Per claim 19:

The rejection of claim 12 is incorporated, and further, Eager discloses:

- said first computer language is a first object-oriented language capable of pictorial

  representation typically in a parent-child tree configuration and said different computer

  language is a second object-oriented language capable of pictorial representation

  typically in a flat database configuration (see FIG. 20A and 20B and related discussion).

Per claim 20:

The rejection of claim 12 is incorporated, and further, Eager discloses:

- apparatus for inhibiting initiation of operation of said converting means until said public

  functions and/or data attributes of at least one of said header files are located (see FIG. 2

  and related discussion).

Per claim 21:

The rejection of claim 12 is incorporated, and further, Eager discloses:

- a SAN which communicates with and is controlled by said computer system (see FIG. 2,

  element 150 and related discussion).

Per claim 22:

The rejection of claim 12 is incorporated, and further, Eager discloses:

- said management software is storage management software (col. 2, lines 30-35 "A

    transition of an entire business enterprise to a distributed infrastructure based on the new

    architecture is performed using a process for organizing and managing the transition...

    this requires that each legacy (source) application be identified and prioritized").

Claims 24-25 are the method claims corresponding to system claims 1-2, respectively, and

rejected under the same rational set forth in connection with the rejection of claims 1-2,

respectively, above.

Claims 27-29 are the method claims corresponding to system claims 4-6, respectively, and

rejected under the same rational set forth in connection with the rejection of claims 4-6,

respectively, above.

Claim 31 is the method claims corresponding to system claims 8, and rejected under the same

rational set forth in connection with the rejection of claim 8, above.

Claims 32 and 33 are the method claims corresponding to system claim 9 and rejected under the

same rational set forth in connection with the rejection of claim 9 above.

Per claim 34:

The rejection of claim 24 is incorporated, and further, Eager disclose:

- wherein said standardized software architecture is preferred non-legacy architecture

  (col.2, lines 15-20 "The distributed infrastructure is preferably a multi-tiered client/server

  target architecture that adheres to open system standards").

Claims 37-39, 41-42, 44-47 are the computer program product claim corresponding to system

claims 1-2, 4, 5, 8, 9, 34 and 10, respectively, and rejected under the same rational set forth in

connection with the rejection of claims 1-2, 4, 5, 8, 9, 34 and 10, respectively, above.

Claims 49-50 are the computer program product claim corresponding to system claims 1 and 11,

respectively, and rejected under the same rational set forth in connection with the rejection of

claims 1 and 11, respectively, above.

Per claims 52, 57, 58, and 59:

Eager discloses:

- program code for accessing header files within said schema to obtain a header file

  containing particular information (col. 20, lines 25-32 "The schema is the logical level

  description tool. In the relational model, a database schema consists of the description of

  the tables, their fields, and the fields formats and domains");

- program code for parsing said header file to obtain a particular result (see FIG. 16 and

  related discussion);

- whereby communication about managing said functional system transmitted between said

  computer system and said computer devices operating under said second software

  architecture is obtained (see FIG. 1 and related discussion).

Eager does not explicitly disclose program code for opening an output file for storage of other

than said particular information related to said particular result; program code for continued

parsing of said header file to locate public functions and/or data attributes; and, program code for

emitting special code to said output file that calls said public functions and/or data attributes to

obtain called public functions and/or data attributes and for converting said called public

functions and/or data attributes to language compatible with said second software architecture.

However, Bapat discloses in an analogous computer system program code for opening an

output file for storage of other than said particular information related to said particular result;

program code for continued parsing of said header file to locate public functions (col. 3, lines 53-

54 "manipulating a representation of the object class... stored... table schema" and col. 9, lines

1-2 "C++ source and header files are opened"); and, program code for emitting special code to

said output file that calls said public functions and/or data attributes to obtain called public

functions(col. 13, lines 15-16 "Control... passes to... attribute insertion routine is called of each

attribute") and/or data attributes and for converting said called public functions and/or data

attributes to language compatible with said second software architecture(col. 6, lines 28-29 "it is

desirable to be able to provide... storage of the attributes of these objects managed by the

network management system").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

the invention was made to incorporate the method of manipulating header files as taught by

Bapat into the method of transition an entire business enterprise to a distributed infrastructure as

taught by Eager. The modification would be obvious because of one of ordinary skill in the art

would manipulate the header files where the transition of enterprise occurs as suggested by Eager

(col. 1 to 2, lines 64-67 and 1-6).

Per claim 53:

The rejection of claim 52 is incorporated, and further, Eager discloses:

- wherein said functional system is a storage system and management software is a storage

  management software (col. 2, lines 30-35 "A transition of an entire business enterprise to

  a distributed infrastructure based on the new architecture is performed using a process for

  organizing and managing the transition… this requires that each legacy (source)

  application be identified and prioritized").

Per claim 54:

The rejection of claim 52 is incorporated, and further, Eager discloses:

- wherein said functional system is a SAN and said management software is SAN

  management software (see FIG. 2, element 150 and related discussion).

Per claim 55:

The rejection of claim 52 is incorporated, and further, Eager disclose:

- wherein said first software is legacy software architecture and said second software

  architecture is non-legacy software architecture (col.2, lines 15-20 "The distributed

infrastructure is preferably a multi-tiered client/server target architecture that adheres to

open system standards").

Per claim 60:

The rejection of claim 59 is incorporated, and further, Eager discloses:

- said functional system is a storage management software (col. 2, lines 30-35 "A transition

  of an entire business enterprise to a distributed infrastructure based on the new

  architecture is performed using a process for organizing and managing the transition...

  this requires that each legacy (source) application be identified and prioritized").

Per claim 61:

The rejection of claim 59 is incorporated, and further, Eager discloses:

- wherein said functional system is a SAN (see FIG. 2, element 150 and related

  discussion).

Per claim 62:

The rejection of claim 59 is incorporated, and further, Eager discloses:

- wherein said first requests are received from out of the said network (see FIG. 1 and

  related discussion).

Claim 63-67 are the computer program product claim corresponding to system claims 1, 34, 10,

21 and 2, respectively, and rejected under the same rational set forth in connection with the

rejection of claims1, 34, 10, 21 and 2, respectively, above.

Claim 68-69 are the computer program product claim corresponding to system claims 1 and 34,

respectively, and rejected under the same rational set forth in connection with the rejection of

claims 1 and 34, respectively, above.

Per claim 75:

Eager discloses:

- translating and manipulating said header files to obtain translated and manipulated header

  files (col. 20, lines 25-32 "The schema is the logical level description tool. In the

  relational model, a database schema consists of the description of the tables, their fields,

  and the fields formats and domains");

- receiving first requests from outside of said network in first language incompatible with

  said software architecture (see FIG. 1 and related discussion);

- in cooperation with said translated and manipulated header files, converting said

  responses to equivalent responses compatible with said first language and communicating

  said equivalent responses to said outside of said network (col. 2, lines 44-57 "...the

  automated capability to translate existing source applications into new target applications

  on a multi-tiered client/server architecture... translation of source applications to target

  applications includes the conversion of user interfaces, procedural languages, and data

  definitions... conversions use a two-phase process where source program components

written in the source languages are first translated to components in a common

intermediate language... intermediate language components are then translated to target

program components in the target languages... one translation module is required for

each source and target language")..

Eager does not explicitly disclose in cooperation with said translated and manipulated header

files, obtaining responses to said first requests in second language compatible with said software

architecture.

However, Bapat discloses in an analogous computer system in cooperation with said

translated and manipulated header files, obtaining responses to said first requests in second

language compatible with said software architecture (col. 3, lines 53-54 "manipulating a

representation of the object class... stored... table schema" and col. 9, lines 1-2 "C++ source

and header files are opened" and col. 6, lines 28-29 "it is desirable to be able to provide...

storage of the attributes of these objects managed by the network management system" and col.

3, lines 53-54 "manipulating a representation of the object class... stored... table schema" and

col. 13, lines 15-16 "Control... passes to... attribute insertion routine is called of each

attribute").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

the invention was made to incorporate the method of manipulating header files as taught by

Bapat into the method of transition an entire business enterprise to a distributed infrastructure as

taught by Eager. The modification would be obvious because of one of ordinary skill in the art

would manipulate the header files where the transition of enterprise occurs as suggested by Eager

(col. 1 to 2, lines 64-67 and 1-6).

Per claim 76:

The rejection of claim 75 is incorporated, and further, Eager disclose:

- wherein said software architecture is legacy software architecture (col.2, lines 15-20 "The

   distributed infrastructure is preferably a multi-tiered client/server target architecture that

   adheres to open system standards").

Per claim 77:

The rejection of claim 76 is incorporated, and further, Eager discloses:

- storage system is a SAN (see FIG. 2, element 150 and related discussion).

Per claim 78:

The rejection of claim 75 is incorporated, and further, Eager discloses:

- whrerin said first language is a first object-oriented language capable of pictorial

   representation typically in a flat database configuration and said second language is a

   second object-oriented language capable of pictorial representation typically in a parent-

   child tree configuration (see FIG. 20A and 20B and related discussion).

11. Claims 3, 7, 11, 14, 18, 23, 26, 30, 40, 43, 48, 51, 56, 79-80 are rejected under 35

U.S.C. 103(a) as being unpatentable over Eager in view of Bapat and further in view of

Applicant's Admitted Prior Art.

Per claim 3:

The rejection of claim 1 is incorporated, and further, Neither Eager nor Bapat explicitly disclose

said first computer language is RAID++ and said different computer language is XML/CIM.

However, admitted prior art discloses in an analogous computer system said first

computer language is RAID++ (Applicant's specification, pages 4, lines 6-9 "Object-oriented

computer language C++... a schema... that derived from or implemented in RAID++") and

said different computer language is XML/CIM (Applicant's specification, pages 7, lines 12-13

"the aforementioned XML computer language; and, on top of XML is a new and advantageous

schema called Common Information Model (CIM)").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

the invention was made to incorporate the method of having first computer language is

RAID++ and different computer language is XML/CIM as taught admitted prior art in

corresponding to method of converting a program of a first architecture to a second architecture

as taught by Eager. The modification would be obvious because of one of ordinary skill in the

art would be motivated to convert the first language of a software architecture to a second

language of a software architecture to provide less arduous code generation to improve the

communication within the corporate as suggested in admitted prior art (Applicant's

specification, pages 2 and 3, lines 23-25 and 1-20, respectively).

Per claim 7:

The rejection of claim 1 is incorporated, and further, Neither Eager nor Bapat explicitly disclose said first computer language is C++ and said different computer language is XML/CIM.

However, admitted prior art discloses in an analogous computer system said first computer language is C++ and said different computer language is XML/CIM (Applicant's specification, pages 4, lines 6-9 "Object-oriented computer language C++... a schema... that derived from or implemented in RAID++" and Applicant's specification, pages 7, lines 12-13 "the aforementioned XML computer language; and, on top of XML is a new and advantageous schema called Common Information Model (CIM)").

The feature of using the languages would be obvious for the reasons set forth in the rejection of claim 3.

Per claim 11:

The rejection of claim 1 is incorporated, and further, Neither Eager nor Bapat explicitly disclose said management software is selected from the group consisting of storage, printer, and server management software.

However, admitted prior art discloses in an analogous computer system management software is selected from the group consisting of storage, printer, server and other-component management software (Applicant's specification, pages 2, lines 15-17 "software which runs on and controls that hardware such as operating systems software and applications software such as peripheral-device management software").

The feature of storage management software would be obvious for the reasons set forth in the rejection of claim 3.

Per claim 14:

The rejection of claim 12 is incorporated, and further, Neither Eager nor Bapat explicitly disclose

said first computer language is RAID++ and said different computer language is XML/CIM.

However, admitted prior art discloses in an analogous computer system said first

computer language is RAID++ (Applicant's specification, pages 4, lines 6-9 "Object-oriented

computer language C++... a schema... that derived from or implemented in RAID++") and

said different computer language is XML/CIM (Applicant's specification, pages 7, lines 12-13

"the aforementioned XML computer language; and, on top of XML is a new and advantageous

schema called Common Information Model (CIM)").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

the invention was made to incorporate the method of having first computer language is

RAID++ and different computer language is XML/CIM as taught admitted prior art in

corresponding to method of converting a program of a first architecture to a second architecture

as taught by Eager. The modification would be obvious because of one of ordinary skill in the

art would be motivated to convert the first language of a software architecture to a second

language of a software architecture to provide less arduous code generation to improve the

communication within the corporate as suggested in admitted prior art (Applicant's

specification, pages 2 and 3, lines 23-25 and 1-20, respectively).

Per claim 18:

The rejection of claim 12 is incorporated, and further, Neither Eager nor Bapat explicitly disclose said first computer language is C++ and said different computer language is XML/CIM.

However, admitted prior art discloses in an analogous computer system said first computer language is C++ (Applicant's specification, pages 4, lines 6-9 "Object-oriented computer language C++... a schema... that derived from or implemented in RAID++" and Applicant's specification, pages 7, lines 12-13 "the aforementioned XML computer language; and, on top of XML is a new and advantageous schema called Common Information Model (CIM)").

The feature of using the languages would be obvious for the reasons set forth in the rejection of claim 14.

Per claim 23:

The rejection of claim 12 is incorporated, and further, Neither Eager nor Bapat explicitly disclose said management software is selected from the group consisting of storage, printer, and server management software.

However, admitted prior art discloses in an analogous computer system management software is selected from the group consisting of storage, printer, server and other-component management software (Applicant's specification, pages 2, lines 15-17 "software which runs on and controls that hardware such as operating systems software and applications software such as peripheral-device management software").

The feature of storage management software would be obvious for the reasons set forth in the rejection of claim 14.

Claims 26 is the method claims corresponding to system claim 3, and rejected under the same ·rational set forth in connection with the rejection of claim 3, above.

Claims 30 is the method claims corresponding to system claim 8, and rejected under the same rational set forth in connection with the rejection of claim 8, above.

Claim 40, 43, and 48 are the computer program product claim corresponding to system claims 3, 7, and 11 and rejected under the same rational set forth in connection with the rejection of claims 3, 7, and 11, above.

Claim 51 is the computer program product claim corresponding to system claim 11, and rejected under the same rational set forth in connection with the rejection of claim 11, above.

Per claim 56:

The rejection of claim 52 is incorporated, and further, Neither Eager nor Bapat explicitly disclose wherein said functional system is selected from the group consisting of storage system, printer system, server system or other-component system and said management software is selected from the group consisting of storage management software, printer management software, server management software and other-component management software respectively.

However, admitted prior art discloses in an analogous wherein said functional system is selected from the group consisting of storage system, printer system, server system or other-component system and said management software is selected from the group consisting of

storage management software, printer management software, server management software and

other-component management software respectively (Applicant's specification, pages 2, lines

15-17 "software which runs on and controls that hardware such as operating systems software

and applications software such as peripheral-device management software")

The feature of storage management software would be obvious for the reasons set forth in

the rejection of claim 14.

Per claim 79:

The rejection of claim 78 is incorporated, and further, Neither Eager nor Bapat explicitly disclose

said first language is XML/CIM and said second language is C++.

However, admitted prior art discloses in an analogous computer system said first

language is XML/CIM and said second language is C++ (Applicant's specification, pages 4,

lines 6-9 "Object-oriented computer language C++... a schema... that derived from or

implemented in RAID++" and Applicant's specification, pages 7, lines 12-13 "the

aforementioned XML computer language; and, on top of XML is a new and advantageous

schema called Common Information Model (CIM)").

The feature of using the languages would be obvious for the reasons set forth in the

rejection of claim 14.

Per claim 80:

The rejection of claim 79 is incorporated, and further, neither Eager nor Bapat explicitly disclose

wherein said C++ language is RAID++.

However, admitted prior art discloses in an analogous computer system wherein said C++

language is RAID++ (Applicant's specification, pages 4, lines 6-9 "Object-oriented computer

language C++... a schema... that derived from or implemented in RAID++" and Applicant's

specification, pages 7, lines 12-13 "the aforementioned XML computer language; and, on top of

XML is a new and advantageous schema called Common Information Model (CIM)").

The feature of using the languages would be obvious for the reasons set forth in the

rejection of claim 14.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 70-73, 81-83, 89 are rejected under 35 U.S.C. 102(b) as being anticipated by

Eager.

Per claim 70:

Eager discloses:

- A method for managing functional systems to be practiced on a computer compatible with computer software architecture (col. 4, lines 23-30 "FIG. 1...the system 1 includes a multi-tiered architecture 10, a re-architecting system 20 for converting source applications of an enterprise to target applications on the multi-tiered architecture 10...") comprising:

- receiving first requests in first language incompatible with said computer software architecture (see FIG. 22 and related discussion);

- obtaining responses to said first requests in second language compatible with said computer software architecture (see FIG. 22 and 24 and related discussion); and,

- converting said responses to equivalent responses compatible with said first language and communicating said equivalent responses to the destination from which, or to destinations related to that from which, said first requests originated (col. 2, lines 44-57 "...the automated capability to translate existing source applications into new target applications on a multi-tiered client/server architecture... translation of source applications to target applications includes the conversion of user interfaces, procedural languages, and data definitions... conversions use a two-phase process where source program components written in the source languages are first translated to components in a common intermediate language... intermediate language components are then translated to target program components in the target languages... one translation module is required for each source and target language").

Per claim 71:

The rejection of claim 70 is incorporated, and further, Eager discloses:

- wherein said computer software architecture is legacy software architecture (col.2, lines 15-20 "The distributed infrastructure is preferably a multi-tiered client/server target architecture that adheres to open system standards").

Per claim 72:

The rejection of claim 71 is incorporated, and further, Eager discloses:

- wherein said functional systems include a storage system (col. 2, lines 30-35 "A transition of an entire business enterprise to a distributed infrastructure based on the new architecture is performed using a process for organizing and managing the transition... this requires that each legacy (source) application be identified and prioritized").

Per claim 73:

The rejection of claim 71 is incorporated, and further, Eager discloses:

- wherein said functional systems include a SAN (see FIG. 2, element 150 and related discussion).

Per claim 81:

Eager discloses:

- an interface between said first computer network and said second computer network (col. 2, lines 45-59 "...translation of source applications to target applications includes the

conversion of user interfaces, procedural languages, and data definitions...") to

automatically convert communication from said second computer network into a form

compatible with said first computer network and to automatically convert response to

said communication generated by said first computer network into a form compatible

with said second computer network (col. 2, lines 44-57 "...the automated capability to

translate existing source applications into new target applications on a multi-tiered

client/server architecture... translation of source applications to target applications

includes the conversion of user interfaces, procedural languages, and data definitions...

conversions use a two-phase process where source program components written in the

source languages are first translated to components in a common intermediate

language... intermediate language components are then translated to target program

components in the target languages... one translation module is required for each source

and target language").

Per claim 82:

The rejection of claim 81 is incorporated, and further, Eager discloses:

- wherein said first software architecture is legacy software architecture and said second

  software architecture is non-legacy software architecture (col.2, lines 15-20 "The

  distributed infrastructure is preferably a multi-tiered client/server target architecture that

  adheres to open system standards").

Per claim 83:

The rejection of claim 82 is incorporated, and further, Eager discloses:

- wherein said first computer network operates in accordance with said legacy software

    architecture supporting a first object-oriented computer language capable of pictorial

    representation typically in a parent-child tree configuration, and wherein said second

    computer network operates in accordance with said non-legacy software architecture

    supporting a second object-oriented computer language capable of pictorial

    representation typically in a flat database configuration (see FIG. 20A and 20B and

    related discussion).

Per claim 89:

The rejection of claim 81 is incorporated, and further, Eager discloses:

- wherein said response is communicated to the destination from which, or to destinations

    related to that from which, said communication originated (see FIG. 1 and related

    discussion).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

    obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims 74, 84-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eager in

view Applicant's Admitted Prior Art.

Per claim 74:

The rejection of claim 71 is incorporated, and further, neither Eager nor Bapat explicitly disclose

wherein said functional systems are selected from the group consisting of storage, printer, and

server systems.

However, admitted prior art discloses in an analogous computer system wherein said

functional systems are selected from the group consisting of storage, printer, and server systems

(Applicant's specification, pages 2, lines 15-17 "software which runs on and controls that

hardware such as operating systems software and applications software such as peripheral-device

management software").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

the invention was made to incorporate the method of having the systems selected from the group

consisting of storage, printer, and server systems as taught by admitted prior art in corresponding

to method of converting a program of a first architecture to a second architecture as taught by

Eager. The modification would be obvious because of one of ordinary skill in the art would be

motivated to convert the first language of a software architecture to a second language of a

software architecture to provide less arduous code generation to improve the communication

within the corporate as suggested in admitted prior art (Applicant's specification, pages 2 and 3,

lines 23-25 and 1-20, respectively).

Per claim 84:

The rejection of claim 83 is incorporated, and further, Eager does not explicitly disclose wherein said first object-oriented computer language is C++ and wherein said second object-oriented computer language is XML/CIM.

However, admitted prior art discloses in an analogous computer system wherein said first object-oriented computer language is C++ and wherein said second object-oriented computer language is XML/CIM (Applicant's specification, pages 4, lines 6-9 "Object-oriented computer language C++... a schema... that derived from or implemented in RAID++" and Applicant's specification, pages 7, lines 12-13 "the aforementioned XML computer language; and, on top of XML is a new and advantageous schema called Common Information Model (CIM)").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of having first computer language is RAID++ and different computer language is XML/CIM as taught admitted prior art in corresponding to method of converting a program of a first architecture to a second architecture as taught by Eager. The modification would be obvious because of one of ordinary skill in the art would be motivated to convert the first language of a software architecture to a second language of a software architecture to provide less arduous code generation to improve the communication within the corporate as suggested in admitted prior art (Applicant's specification, pages 2 and 3, lines 23-25 and 1-20, respectively).

Per claim 85:

The rejection of claim 84 is incorporated, and further, Eager discloses:

- wherein said communication includes management software communication (col. 2, lines

  30-35 "A transition of an entire business enterprise to a distributed infrastructure based

  on the new architecture is performed using a process for organizing and managing the

  transition... this requires that each legacy (source) application be identified and

  prioritized").

Per claim 86:

The rejection of claim 85 is incorporated, and further, Eager discloses:

- wherein said management software communication includes storage management

  software communication (col. 2, lines 30-35 "A transition of an entire business enterprise

  to a distributed infrastructure based on the new architecture is performed using a process

  for organizing and managing the transition... this requires that each legacy (source)

  application be identified and prioritized").

Per claim 87:

The rejection of claim 86 is incorporated, and further, Eager discloses:

- wherein said storage management software communication relates to SAN

  communication system (see FIG. 2, element 150 and related discussion).

Per claim 88:

The rejection of claim 85 is incorporated, and further, neither Eager nor Bapat explicitly disclose wherein said management software communication includes storage, printer, and server communications.

However, admitted prior art discloses in an analogous computer system wherein said management software communication includes storage, printer, and server communications (Applicant's specification, pages 2, lines 15-17 "software which runs on and controls that hardware such as operating systems software and applications software such as peripheral-device management software").

The feature of storage management software would be obvious for the reasons set forth in the rejection of claim 84.

Response to Arguments

16. Applicant's arguments with respect to claims 1, 12, 24, 37, 49, 52, 59, 63, 68, 70, 75, and 81 has been considered but are moot in view of new ground(s) of rejection.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Satish S. Rampuria** whose telephone number is **(571) 272-3732**. The examiner can normally be reached on **8:30 am to 5:00 pm** Monday to Friday except every

other Friday and federal holidays. Any inquiry of a general nature or relating to the status of this

application should be directed to the **TC 2100 Group receptionist: 571-272-2100**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, **Tuan Q. Dam** can be reached on **(571) 272-3695**. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be

obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Satish S. Rampuria
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Art Unit 2124
06/27/2005

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PRIMARY EXAMINER